

EVALUATING INITIALLY UNTRUSTED EVIDENCE
IN AN EVIDENCE-BASED SECURITY POLICY MANAGER

Abstract of the Invention

An evidence-based policy manager generates a permission grant set for a code assembly
5 received from a resource location. The policy manager executes in a computer system (e.g., a
Web client or server) in combination with the verification module and class loader of the run-
time environment. The permission grant set generated for a code assembly is applied in the run-
time call stack to help the system determine whether a given system operation by the code
assembly is authorized. Both code assemblies and evidence may be received from a local origin
or from a remote resource location via a network (e.g., the Internet). Evidence having different
levels of trust may be evaluated in combination so that a permission grant set is associated only
with trusted code assemblies. The policy manager may comprise execution modules for parsing
a security policy specification, generating one or more code hierarchies, evaluating membership
of the received code assembly in one or more code groups, and generating a permission grant set
5 based upon this membership evaluation.